Refine Search

Search Results -

Terms	Documents
L1 and (simplex same duplex)	10

Database:
US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Search: L2

Refine Search | Recall Text | Clear | Interrupt

Search History

DATE: Wednesday, August 10, 2005 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=PGPB; PLUR=YES; OP=OR			
L2	L1 and (simplex same duplex)	10	L2
L1	cable$6 same (backplane or "back plane") same (board or card)	576	L1

END OF SEARCH HISTORY

Refine Search

Search Results -

Terms	Documents
(709/253 |370/257 |370/276 |370/454 |710/14 |710/314 |710/300 |710/301 |710/302 |710/303 |710/304 |710/105 |710/62 |710/72 |710/305 |712/30 |712/32).ccls.	6187

Database:
- US Pre-Grant Publication Full-Text Database
- US Patents Full-Text Database
- US OCR Full-Text Database
- EPO Abstracts Database
- JPO Abstracts Database
- Derwent World Patents Index
- IBM Technical Disclosure Bulletins

Search: L1

Refine Search

Recall Text | Clear | Interrupt

Search History

DATE: Wednesday, August 10, 2005 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
	DB=PGPB,USPT,USOC; PLUR=YES; OP=OR		
L1	710/14,314,300-304,105,62,72,305;712/30,32;370/257,276,454;709/253.ccls.	6187	L1

END OF SEARCH HISTORY

Refine Search

Search Results -

Terms	Documents
L1 and L3	3

Database:
US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Search: L4

Refine Search | Recall Text | Clear | Interrupt

Search History

DATE: Wednesday, August 10, 2005 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=PGPB,USPT,USOC; PLUR=YES; OP=OR			
L4	l1 and L3	3	L4
L3	L2 and (simplex same duplex)	36	L3
L2	cable$6 same (backplane or "back plane") same (board or card)	1765	L2
L1	710/14,314,300-304,105,62,72,305;712/30,32;370/257,276,454;709/253.ccls.	6187	L1

END OF SEARCH HISTORY

Refine Search

Search Results -

Terms	Documents
(710/316 |711/112 |326/30).ccls.	3374

Database:
- US Pre-Grant Publication Full-Text Database
- US Patents Full-Text Database
- US OCR Full-Text Database
- EPO Abstracts Database
- JPO Abstracts Database
- Derwent World Patents Index
- IBM Technical Disclosure Bulletins

Search: L1

Refine Search

Recall Text | Clear | Interrupt

Search History

DATE: Wednesday, August 10, 2005 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=PGPB,USPT,USOC; PLUR=YES; OP=OR			
L1	710/316;711/112;326/30.ccls.	3374	L1

END OF SEARCH HISTORY

Refine Search

Search Results -

Terms	Documents
L1 and L3	0

Database:
US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Search: L4

Refine Search

Recall Text | Clear | Interrupt

Search History

DATE: Wednesday, August 10, 2005 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=PGPB,USPT,USOC; PLUR=YES; OP=OR			
L4	l1 and L3	0	L4
L3	L2 and (simplex same duplex)	36	L3
L2	cable$6 same (backplane or "back plane") same (board or card)	1765	L2
L1	710/316;711/112;326/30.ccls.	3374	L1

END OF SEARCH HISTORY

Refine Search

Search Results -

Terms	Documents
L1 same simplex same duplex	5

Database:
US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Search: L2

Refine Search

Recall Text | Clear | Interrupt

Search History

DATE: Wednesday, August 10, 2005 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=PGPB,USPT,USOC; PLUR=YES; OP=OR			
L2	L1 same simplex same duplex	5	L2
L1	cable$6 same (backplane or (back adj1 plane)) same (board or card)	1765	L1

END OF SEARCH HISTORY

Refine Search

Search Results -

Terms	Documents
L2	0

Database:
US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Search: L3

Refine Search

Recall Text | Clear | Interrupt

Search History

DATE: Wednesday, August 10, 2005 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR			
L3	L2	0	L3
DB=PGPB,USPT,USOC; PLUR=YES; OP=OR			
L2	L1 same simplex same duplex	5	L2
L1	cable$6 same (backplane or (back adj1 plane)) same (board or card)	1765	L1

END OF SEARCH HISTORY

Freeform Search

Database: US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Term: L5 and (simplex or duplex)

Display: 10 **Documents in Display Format:** TI **Starting with Number** 1

Generate: ○ Hit List ◉ Hit Count ○ Side by Side ○ Image

Search Clear Interrupt

Search History

DATE: Wednesday, August 10, 2005 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=USPT; PLUR=YES; OP=OR			
L6	L5 and (simplex or duplex)	3	L6
L5	l1.ab.	70	L5
DB=PGPB,USPT,USOC; PLUR=YES; OP=OR			
L4	(5495584| 5572685| 5613074| 5745795)![pn]	4	L4
DB=EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR			
L3	L2	0	L3
DB=PGPB,USPT,USOC; PLUR=YES; OP=OR			
L2	L1 same simplex same duplex	5	L2
L1	cable$6 same (backplane or (back adj1 plane)) same (board or card)	1765	L1

END OF SEARCH HISTORY

Refine Search

Search Results -

Terms	Documents
L1 and (simplex same duplex)	26

Database:
US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Search: L8

Refine Search

Recall Text | Clear | Interrupt

Search History

DATE: Wednesday, August 10, 2005 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=USPT; PLUR=YES; OP=OR			
L8	L1 and (simplex same duplex)	26	L8
L7	L1 and (simplex or duplex)	132	L7
L6	L5 and (simplex or duplex)	3	L6
L5	l1.ab.	70	L5
DB=PGPB,USPT,USOC; PLUR=YES; OP=OR			
L4	(5495584| 5572685| 5613074| 5745795)![pn]	4	L4
DB=EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR			
L3	L2	0	L3
DB=PGPB,USPT,USOC; PLUR=YES; OP=OR			
L2	L1 same simplex same duplex	5	L2
L1	cable$6 same (backplane or (back adj1 plane)) same (board or card)	1765	L1

END OF SEARCH HISTORY

Refine Search

Search Results -

Terms	Documents
L4 and (simplex same duplex)	1

Database:
US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Search: L5

Refine Search

Recall Text | Clear | Interrupt

Search History

DATE: Wednesday, August 10, 2005 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
	DB=PGPB,USPT,USOC; PLUR=YES; OP=OR		
L5	L4 and (simplex same duplex)	1	L5
L4	L3 same (backplane or "back plane") same (card or board)	46	L4
L3	((without or "no") adj2 cable) or cableless$2	10131	L3
L2	(without or "no") adj2 cable	9883	L2
L1	"without cable"	1556	L1

END OF SEARCH HISTORY

Refine Search

Search Results -

Terms	Documents
L4 and (simplex same duplex)	0

Database:
US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Search: L6

Refine Search

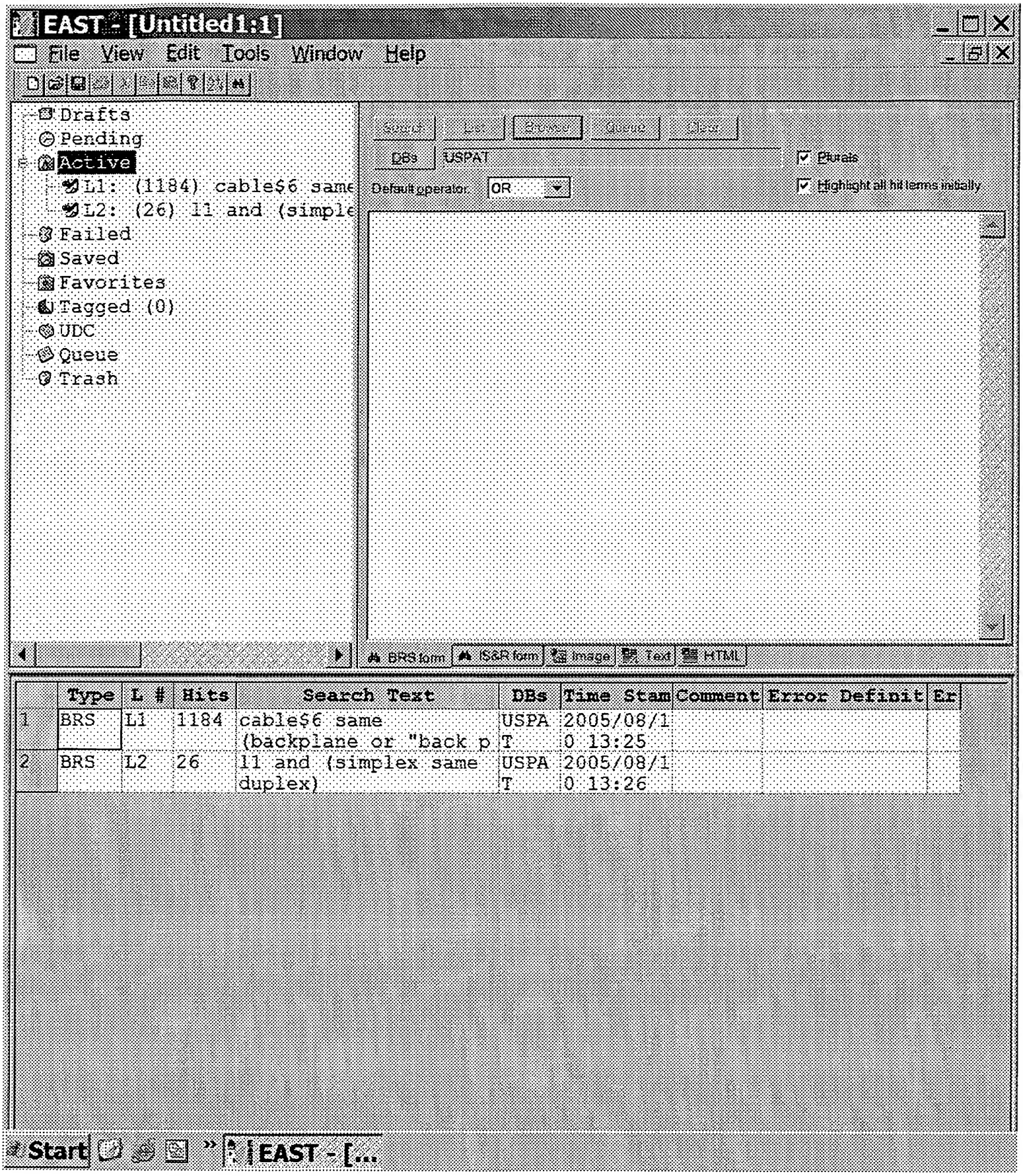
Recall Text Clear Interrupt

Search History

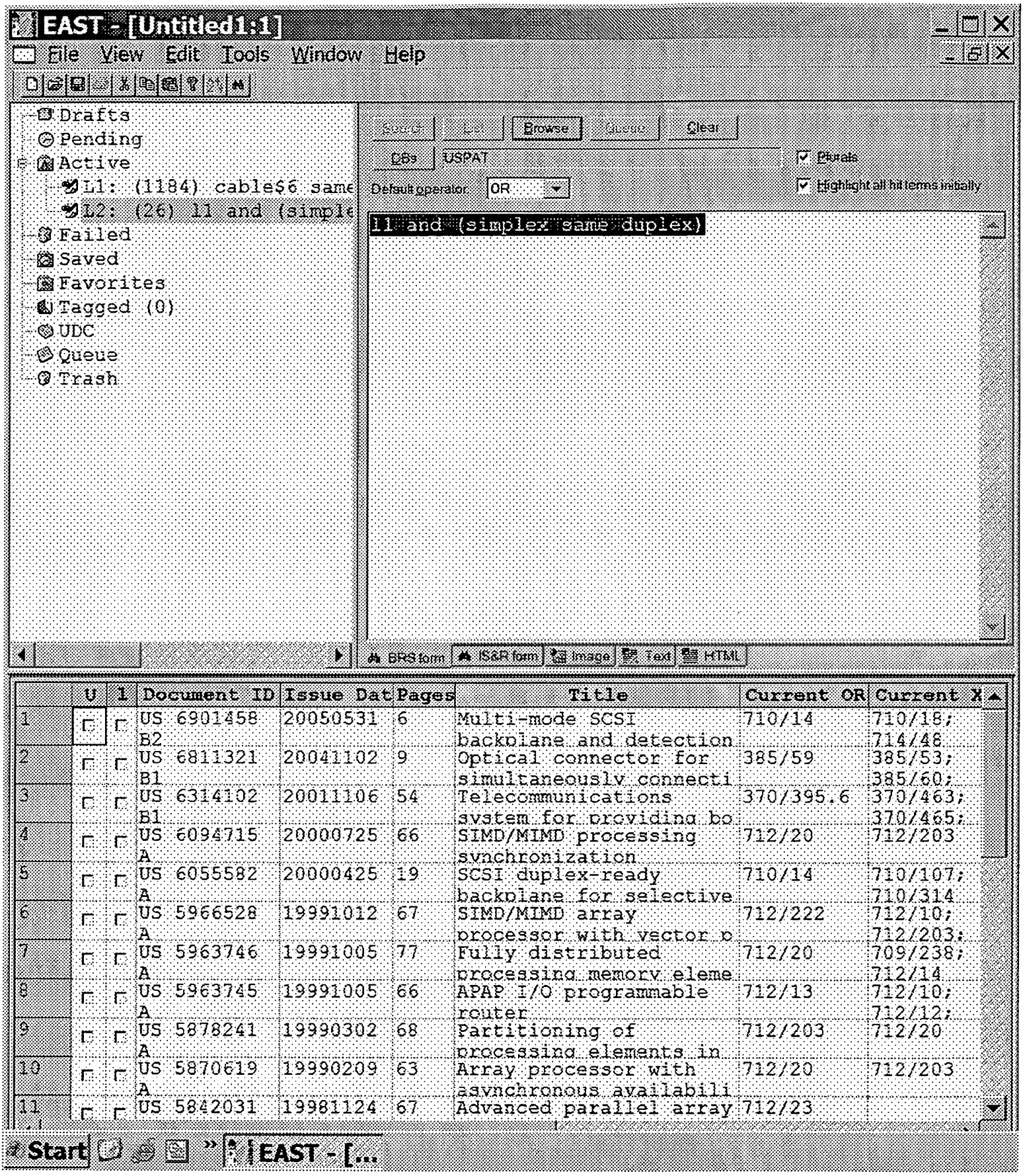
DATE: Wednesday, August 10, 2005 Printable Copy Create Case

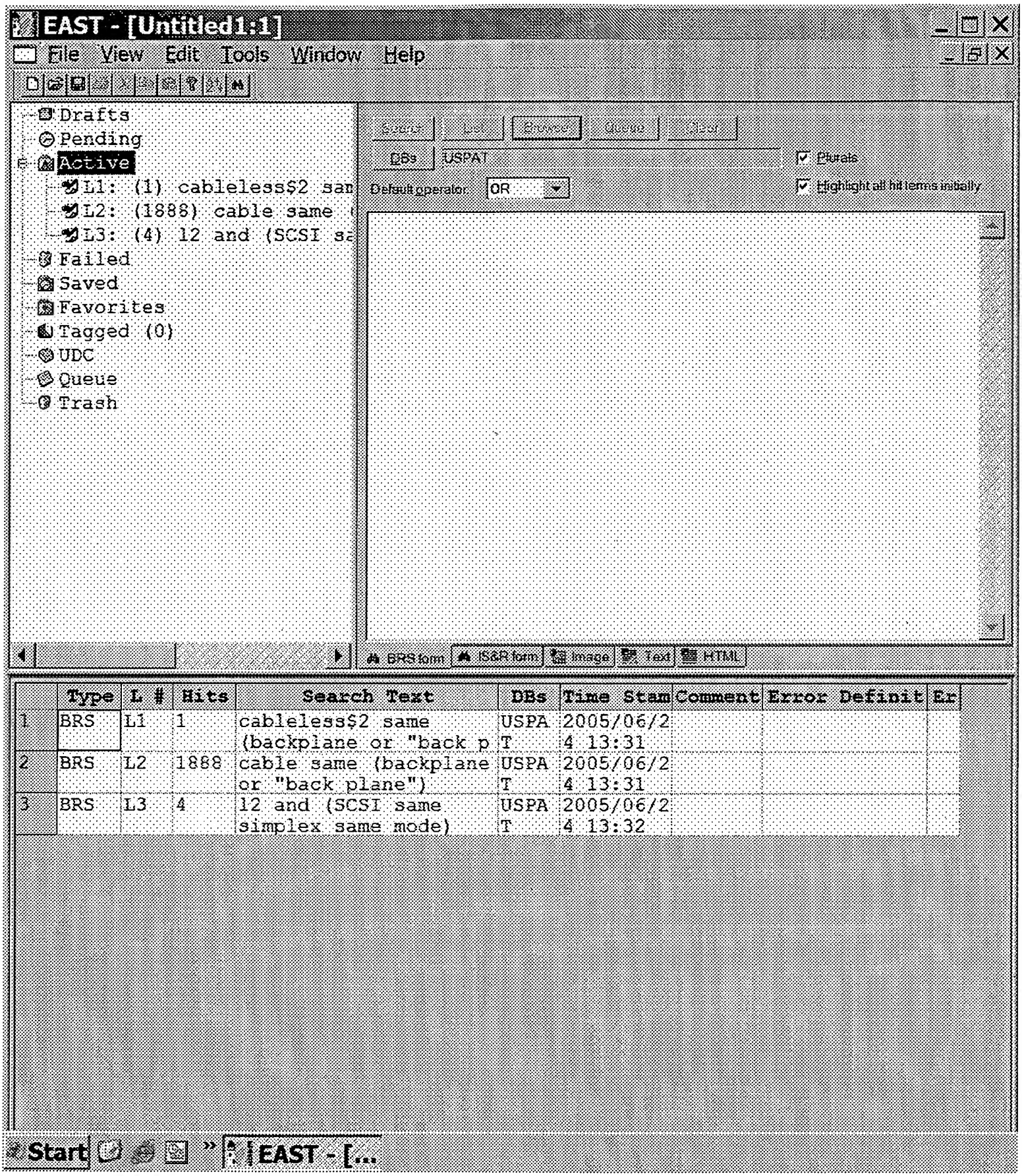
Set Name side by side	Query	Hit Count	Set Name result set
DB=EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR			
L6	L4 and (simplex same duplex)	0	L6
DB=PGPB,USPT,USOC; PLUR=YES; OP=OR			
L5	L4 and (simplex same duplex)	1	L5
L4	L3 same (backplane or "back plane") same (card or board)	46	L4
L3	((without or "no") adj2 cable) or cableless$2	10131	L3
L2	(without or "no") adj2 cable	9883	L2
L1	"without cable"	1556	L1

END OF SEARCH HISTORY

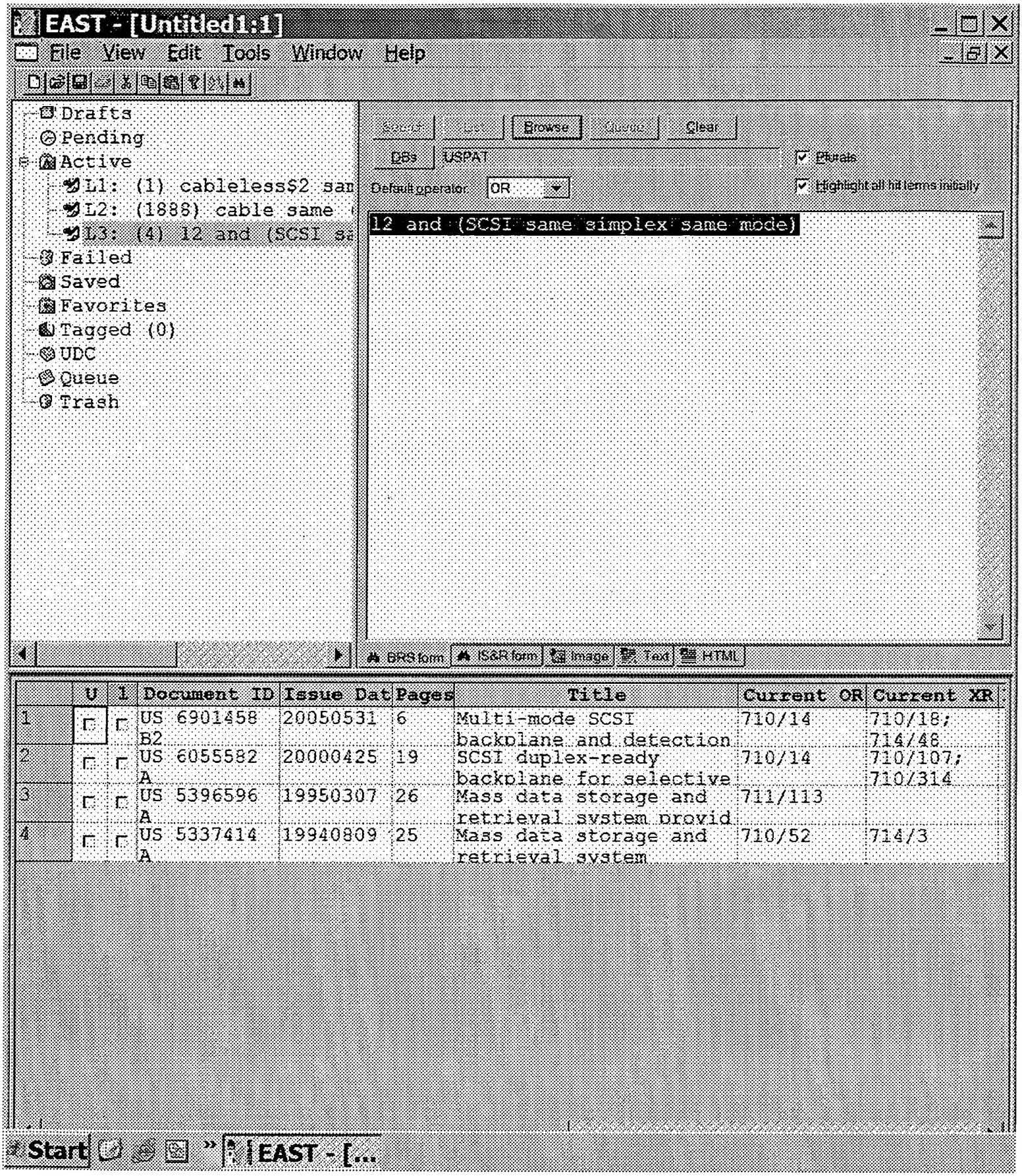


	Type	L #	Hits	Search Text	DBs	Time Stam	Comment	Error Definit	Er
1	BRS	L1	1184	cable$6 same (backplane or "back p	USPAT	2005/08/10 13:25			
2	BRS	L2	26	l1 and (simplex same duplex)	USPAT	2005/08/10 13:26			


EAST - [Untitled1:1]
File View Edit Tools Window Help
Drafts
Pending
Active
L1: (1184) cable$6 same
L2: (26) l1 and (simple
Failed
Saved
Favorites
Tagged (0)
UDC
Queue
Trash
Search
Edit
Browse
Queue
Clear
DBs
USPAT
Plurals
Default operator:
OR
Highlight all hit terms initially
l1 and (simplex same duplex)
BRS form
IS&R form
Image
Text
HTML
U
1
Document ID
Issue Dat
Pages
Title
Current OR
Current X
1 US 6901458 B2 20050531 6 Multi-mode SCSI backplane and detection 710/14 710/18; 714/48
2 US 6811321 B1 20041102 9 Optical connector for simultaneously connecti 385/59 385/53; 385/60;
3 US 6314102 B1 20011106 54 Telecommunications system for providing bo 370/395.6 370/463; 370/465;
4 US 6094715 A 20000725 66 SIMD/MIMD processing synchronization 712/20 712/203
5 US 6055582 A 20000425 19 SCSI duplex-ready backplane for selective 710/14 710/107; 710/314
6 US 5966528 A 19991012 67 SIMD/MIMD array processor with vector p 712/222 712/10; 712/203;
7 US 5963746 A 19991005 77 Fully distributed processing memory eleme 712/20 709/238; 712/14
8 US 5963745 A 19991005 66 APAP I/O programmable router 712/13 712/10; 712/12;
9 US 5878241 A 19990302 68 Partitioning of processing elements in 712/203 712/20
10 US 5870619 A 19990209 63 Array processor with asynchronous availabili 712/20 712/203
11 US 5842031 19981124 67 Advanced parallel array 712/23
Start
EAST - [...



	Type	L #	Hits	Search Text	DBs	Time Stam	Comment	Error Definit	Er
1	BRS	L1	1	cableless$2 same (backplane or "back p	USPAT	2005/06/24 13:31			
2	BRS	L2	1888	cable same (backplane or "back plane")	USPAT	2005/06/24 13:31			
3	BRS	L3	4	12 and (SCSI same simplex same mode)	USPAT	2005/06/24 13:32			


EAST - [Untitled1:1]
File View Edit Tools Window Help
Drafts
Pending
Active
L1: (1) cableless$2 san
L2: (1888) cable same
L3: (4) 12 and (SCSI s
Failed
Saved
Favorites
Tagged (0)
UDC
Queue
Trash
Search
Edit
Browse
Clear
DBs
USPAT
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Default operator:
OR
Highlight all hit terms initially
12 and (SCSI same simplex same mode)
BRS form
IS&R form
Image
Text
HTML
U
1
Document ID
Issue Dat
Pages
Title
Current OR
Current XR
1
US 6901458 B2
20050531
6
Multi-mode SCSI backplane and detection
710/14
710/18; 714/48
2
US 6055582 A
20000425
19
SCSI duplex-ready backplane for selective
710/14
710/107; 710/314
3
US 5396596 A
19950307
26
Mass data storage and retrieval system provid
711/113
4
US 5337414 A
19940809
25
Mass data storage and retrieval system
710/52
714/3
Start
EAST - [...

Results for "(cable*<in>metadata) <and> (backplane<in>metadata) <and> (board or car..." e-mail printer friendly

Your search matched **14** of **1222090** documents.

A maximum of **100** results are displayed, **25** to a page, sorted by **Relevance** in **Descending** order.

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(cable*<in>metadata) <and> (backplane<in>metadata) <and> (board or card<in>r

Check to search only within this results set

Display Format: Citation Citation & Abstract

» Key

IEEE JNL	IEEE Journal or Magazine
IEE JNL	IEE Journal or Magazine
IEEE CNF	IEEE Conference Proceeding
IEE CNF	IEE Conference Proceeding
IEEE STD	IEEE Standard

Select Article Information

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AbstractPlus | Full Text: PDF(816 KB) IEEE CNF

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Design advances in PCB/backplane interconnects for the propagation of high speed Gb/s digital signals

Gisin, F. Pentic-Tanner, Z.
Backplane Technol. & Signal Integrity Design, San Jose, CA, USA

This paper appears in: **Telecommunications in Modern Satellite, Cable and Broadcasting Service, 2003. TELSIKS 2003. 6th International Conference on**
Publication Date: 1-3 Oct. 2003
Volume: 1
On page(s): 184 - 191 vol.1
Number of Pages: 2 vol.xv+841
ISSN:
INSPEC Accession Number:8006870
Digital Object Identifier: 10.1109/TELSKS.2003.1246211
Posted online: 2003-11-17 15:41:37.0

Abstract
Over the past five years tremendous advances have been made in the design of copper-based transmission line interconnects capable of propagating high-speed broadband digital signals over long lengths of printed circuit **boards** (PCBs) and backplanes. Data rates of 5 Gb/s transmitted over a single differential pair routed across more than one meter of PCB and **backplane** interconnect using low-cost FR-4 dielectric material is no longer all that unusual. And leading industry experts predict there is still plenty of bandwidth left to extend copper interconnects to well beyond 10 Gb/s. The high performance interconnects needed to sustain these high data rates are attained through the application of many different engineering design and manufacturing disciplines including active pre/post compensation circuits, cost effective mixed-dielectric PCB and **backplane** stackups, and innovative PCB via interconnect geometries. By applying these interdisciplinary technologies to the design of copper-based interconnects, signal attenuation and deterministic jitter distortions caused by frequency dependent interconnect materials and energy-storing geometric structures are minimized.

Index Terms
Inspec

Controlled Indexing
data integrity dielectric materials digital signals intersymbol interference optical backplanes printed circuit design printed circuits transmission lines

Non-controlled Indexing
5 Gbit/s ISI PCB active prepost compensation circuit **backplane** interconnection **backplane** stackup copper interconnection copper-based transmission line data rate transmission dielectric material differential pair routing energy-storing geometric structure engineering design frequency dependent interconnect material high speed broadband digital signal propagation interconnect geometry interdisciplinary technology intersymbol interference jitter distortion mixed-dielectric PCB printed circuit **board** signal attenuation signal integrity

Author Keywords
Not Available

References

No references available on IEEE Xplore.

Citing Documents

No citing documents available on IEEE Xplore.

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